AMSAT News Service Weekly Bulletins
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SB SAT @ AMSAT $ANS-005.01
MIR FREQUENCY CHANGE

HR AMSAT NEWS SERVICE BULLETIN 005.01 FROM AMSAT HQ
SILVER SPRING, MD, JANUARY 05, 1997
TO ALL RADIO AMATEURS BT
BID: $ANS-005.01

John Blaha, KC5TZQ, made an announcement that, as of
January first 1997, the 2-meter voice and packet frequencies would change
from 145.800 Mhz uplink and 145.200 Mhz downlink to 145.800 Mhz
downlink and 145.200 Mhz uplink for groundstations John
was switching between the two frequencies as he was trying to work
stations and inform anyone listening of the change to the frequencies
used to uplink and downlink to MIR.
Below are the frequencies a groundstation would use to communicate
to the MIR space station.
FM voice ops:
        uplink 145.200 Mhz transmit
        downlink 145.800 Mhz receive

Packet ops:
        uplink 145.200 Mhz transmit
        downlink 145.800 Mhz receive

[ANS thanks John Blaha, KC5TZQ, for this information.]

/EX

SB SAT @ AMSAT $ANS-005.02
MIR QSOs MADE WITH SCHOOLS

HR AMSAT NEWS SERVICE BULLETIN 005.02 FROM AMSAT HQ
SILVER SPRING, MD, JANUARY 05, 1997
TO ALL RADIO AMATEURS BT
BID: $ANS-005.02

''Yes, Yes, Yes.'' That was the reaction of Bruce Burke, WB4YUC, in
late December as he helped students at Silver Lakes Middle School in
North Lauderdale, Florida, talk with US astronaut John Blaha,
KC5TZQ, aboard the Russian space station Mir. The contact--the
first scheduled school QSO between unlicensed students and a NASA
astronaut-ham living on board Mir--marked a new page in the history
of ham radio in space. On Friday December 27, Blaha spoke with 17
students at the Silver Lakes Middle School. Halfway through the
contact, Mir Commander Valery Korzun extended his greetings to the
students and congratulated them for being the first Americans to
take part in this kind of contact. At the end of the QSO, the
students wished Blaha a happy new year. School group contact
coordinators for the Motorola ARC Kai Siwiak, KE4PT, and Burke said
signal strength was outstanding throughout the pass.

The FCC only recently approved third-party contacts with Blaha from
the Russian Mir space station. However, the FCC's permission only
extends through Blaha's mission. Over the past year, the SAREX team
has worked closely with the Mir International Radio EXperiment
(MIREX) team in the United States, the Space Amateur Funk EXperiment
(SAFEX) team in Germany and the Mir Amateur Radio EXperiment (MAREX)

team in Russia to allow unlicensed school students in the US to talk to the astronauts on Mir.

Three other MIREX QSOs also went off on schedule. On Saturday, December 28, students at Granby High and Mary Calcutt Elementary schools in Hampton, Virginia, successfully contacted Blaha aboard Mir and got to put a dozen questions to the astronaut. Blaha attended Mary Calcutt and graduated from Granby High School in the 1960s. The 10-minute contact was conducted from the Amateur Radio satellite station exhibit, KE4ZXW, at the Virginia Air and Space Center. Blaha told the students he had some Granby/Calcutt memorabilia on board Mir that he expects to return to the schools.

Monday, December 30, students at The Johnson School in Warrenville, Illinois, got to ask Blaha how the Mir crew emptied the trash. In all, the students got to ask 15 questions as an audience of some 900 people (including approximately 450 youngsters) looked on. Enthusiasm at all three schools was high despite the fact that the students were on Christmas break, and volunteers, parents and teachers had to take time away from their holiday activities to arrange for equipment and operators.

Friday, January 3, students at Ririe Elementary School, Ririe, Idaho, enjoyed a successful 10-minute QSO with Blaha. Seventeen excited third graders and their teacher, Tina Anderson, got to ask questions of the astronaut.

As a result of the QSOs, all four schools got a lot of media attention. ''These Mir QSOs are so very important since competition is accelerating against SAREX being selected as a payload on the last few orbiting shuttle missions of 1997 and 1998 prior to International Space Station activities,'' said Rosalie White, WA1STO, ARRL Educational Activities Department manager.

Four more schools have been scheduled for contacts before the end of Blaha's mission in mid-January. Jerry Linenger, KC5HBR, will take Blaha's place on Mir.

Schools wishing to arrange contacts with astronauts aboard a US space shuttle carrying the SAREX payload should submit a SAREX application to the ARRL Educational Activities Department (EAD), e-mail ead (at) arrl.org. More information about the MIREX and SAREX programs is available at http://www.arrl.org or check the Mir Web page at http://www.osf.hq.nasa.gov/mir/.

[ANS thanks the ARRL for the news report.]

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SB SAT @ AMSAT $ANS-005.03
TWO P3D KEY WORKERS DEPART

HR AMSAT NEWS SERVICE BULLETIN 005.03 FROM AMSAT HQ
SILVER SPRING, MD, JANUARY 05, 1997
TO ALL RADIO AMATEURS BT
BID: $ANS-005.03

AMSAT-NA's Vice President for Engineering, Dick Jansson WD4FAB announced January 3 that his Assistant Vice President for Engineering, Stan Wood, WA4NFY, has new employment in Colorado, making him unavailable for further work on P3D after sometime in February. In the meantime, Stan will be devoting all the time he can to completing the satellite antenna work he has been doing for the past several years. Dick noted further that this news is doubly bad because Stan's wife, Mary, has been a great help during

the past six months, acting as Office Manager for the Phase 3D Integration Laboratory.

Dick stated for ANS:
"One of the inexorable facts of life in a project like P3D is that people need to live their lives and most of the participants need to work (real) jobs for a living. Most of those of you who do need to so work also occasionally are subject to new job opportunities that cannot be turned away. We are at that threshold with two of our long standing key volunteers,
Stan Wood and his dear wife Mary Wood. Both of these fine people are highly
accomplished pilots in the world of business aviation. It has very recently
come to pass that Stan and Mary have both been offered new opportunities in the Colorado area, and they have accepted this very interesting situation.

Stan and Mary will depart the Florida scene in a very short while and move to their new assignments in Colorado."

The impact to the P3D Project will be felt almost immediately. The up-side

of this all is that Stan is very close to completing the flight antennas for
the spacecraft, his *major* challenge and accomplishment over the years.

Mary Wood has been a key participant at the P3D Laboratory as the Office Manager, keeping all of us on our toes and doing things properly. Both of these super people will be sorely missed at every turn in the project as we

push on to launch later this year. Stan and Mary will depart the Florida area with our fondest wishes for their new jobs and with our deepest appreciation for their help on the project. We would not have been able to

accomplish what we have without their help." Dick concluded by re-affirming
AMSAT's commitment to complete and launch Phase 3D in 1997.

AMSAT President Bill Tynan, W3XO, and Executive Vice president Keith Baker, KB1SF, echoed Dick's statement. "We will all miss Stan and Mary, and their

contributions to the Phase 3D effort" Bill said.

Those who would like to contact Stan and Mary and thank them for their service to AMSAT and wish them well in their new endeavor, may do so at their email address: n280ra@aol.com

[ANS thanks BJ Arts, WT0N, for this report]

/EX

SB SAT @ AMSAT $ANS-005.04
LEO CUNNIFF, W2OEH, SK

HR AMSAT NEWS SERVICE BULLETIN 005.04 FROM AMSAT HQ
SILVER SPRING, MD, JANUARY 05, 1997
TO ALL RADIO AMATEURS BT
BID: $ANS-005.04

Leo Cunniff, W2OEH, recently passed away after a long illness; he was 70 years of age. An early member and substantial contributor to AMSAT, he had a distinguished career in electronics, founding several high-tech companies and retiring as Senior Vice President of Beckman Instruments. Among his many philanthropic activities, he served as chairman of the board of

Stevens
Institute of Technology, his alma mater. Leo was also a longtime member of the North Jersey DX Association. One of the nicest, least self-possessed people I've ever known despite his many accomplishments, Leo will be missed.

[Ray Soifer, W2RS, provided this information to ANS.]

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SB SAT @ AMSAT $ANS-005.05
LINENGER TO REPLACE BLAHA

HR AMSAT NEWS SERVICE BULLETIN 005.05 FROM AMSAT HQ
SILVER SPRING, MD, JANUARY 05, 1997
TO ALL RADIO AMATEURS BT
BID: $ANS-005.05

Astronaut Jerry Linenger is scheduled to replace John Blaha aboard Mir. He's scheduled to be launched on STS-81 (currently set for launch on January 12) and will return on STS-84 (scheduled for May).

Jerry is the first of the long term Mir astronauts license for a previous shuttle mission before his assignment to a Mir
mission who had an active ham license before his assignment to a Mir mission. He earned the call sign KC5HBR while training for his only previous spaceflight, STS-64.

As far as third party agreements go, the temporary third party agreement which permits John Blaha to talk to unlicensed students expires when John leaves Mir. So it will be illegal to permit non-hams to talk to Jerry until the paperwork is approved for Jerry's third-party agreement.

Unlike the previous shuttle-Mir astronaut (Norm Thagard, Shannon Lucid, and John Blaha) who have had many spaceflights before their trips to Mir, Jerry's only experience is his eleven days during STS-64.

Also unlike the previous Mir astronauts he's got a family which is just starting. He has a one year old son and another child expected in June. His wife Kathy is actually planning on going back to Russia after his launch since she works for the NASA office at Star City as a medical trainer and will be supporting Mike Foale's training. Currently she's planning on coming back to the U.S. for the birth of her second child, which is due after Jerry's return. However Jerry is quite aware that he may be in space while his second child is born if there are any delays.

Jerry is scheduled to spend 132 days aboard Mir, but of course that may change for other reasons. He will become the first U.S. astronaut to perform an EVA from Mir (wearing a Russian spacesuit).

His full official NASA biography is available on the NASA Web site - http://www.jsc.nasa.gov/Bios/htmlbios/linenger.html

Jerry Linenger KC5HBR said -"Maybe I'm the right person for this kind of mission because I'm not a real good communicator. I could live without a telephone. So car phones and this great revolution we've had, does not phase me. If I were by myself without my family I probably wouldn't have a phone in my house so I could have some peace and quiet. I enjoy talking on the ham [radio], but I think I'm going to be looking out the window more than just talking. [As far as] news from home we have a little bit of E-mail capability and things like that. So as I want the news I'll be grabbing it. My old alumni University of North Carolina and I've been a big Michigan fan, college basketball I enjoy. So I'll be looking for that information."

In the past astronaut's activities have changed, especially after long periods in space. So while Jerry may not plan on using the radio much while he's in space, that may change over time.

[ANS thanks Philip Chien, KC4YER, Earth News - space writer and consultant for this news item.]

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SB SAT @ AMSAT $ANS-005.06
P3D S BAND KIT INFO

HR AMSAT NEWS SERVICE BULLETIN 005.06 FROM AMSAT HQ
SILVER SPRING, MD, JANUARY 05, 1997
TO ALL RADIO AMATEURS BT
BID: $ANS-005.06

An S-Band to 70cm Receive Converter for Phase 3D
A kit of parts for this project will be available from the end of January or
early February. The kit comprises of all the components from the parts list

including a 109.333 MHz crystal, and tinplate box from Piper Communications mentioned in the notes. A reprint of the article which appeared in The AMSAT Journal and OSCAR News with additional construction information is also included.

To further simply construction, the PCB to be supplied with the kit has been modified to include plated through holes. This will remove the need for the wire feedthroughs used for all earth-grounded connections. The use of a plated through holes printed circuit board will significantly reduce construction time and give a professional finish to the project.

The kit will be available from the author at the address below.
Cost: 66.80 British pounds (about US $105.00)
Postage: United Kingdom: 1.90 British Pounds
Europe: 3.75 British Pounds
United States, VE, Z1, VK: 4.75 British Pounds
(about US $7.50)
All non-UK orders will be sent by small packet air mail and include international recorded delivery. Insured post is available to most destinations if required. Checks and international money orders in British sterling may be sent to:

David Bowman, G0MRF
31 Benson Close
Hounslow, Middlesex
England, TW3 3QX

[ANS thanks The AMSAT Journal editor Russell K. Tillman, KC5JVB, for this product information.]

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SB SAT @ AMSAT $ANS-005.07
BEST FIST NOMINATIONS DUE

HR AMSAT NEWS SERVICE BULLETIN 005.07 FROM AMSAT HQ
SILVER SPRING, MD, JANUARY 05, 1997
TO ALL RADIO AMATEURS BT
BID: $ANS-005.07

Judging by the activity levels observed at W2RS (especially on

RS-10 and RS-12), OSCAR SKN '97 was a great success, with lots of fun for all who took part.

Some nominations for "Best Fist" have already been received. If you haven't yet sent yours in, please take a moment to nominate someone you worked. To submit a "Best Fist" nomination, please address it via packet radio to W2RS @ WA2SNA.NJ.USA.NA or W2RS @ GB7HSN.#32.GBR.EU (whichever is closer to you), via the Internet to <w2rs@amsat.org>, or via "snail-mail" to W2RS' callbook address. Those nominated will be featured in a bulletin sent to Amateur Radio publications and posted to ANS and AMSAT-BB in early February

[ANS thanks Ray Soifer, W2RS, for this update.]

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SB SAT @ AMSAT $ANS-005.08
S. A. YOUTH TO TALK TO MIR

HR AMSAT NEWS SERVICE BULLETIN 005.08 FROM AMSAT HQ
SILVER SPRING, MD, JANUARY 05, 1997
TO ALL RADIO AMATEURS BT
BID: $ANS-005.08

On Sunday 5 January, 1997, many young
South African youth will be talking to MIR as part of the ARISAS ,
Amateur Radio in South African Schools project. ARISAS
had hoped to include youth from other African countries but due to
third party restrictions it was not possible in the few days available to
make the arrangements.

ARISAS has arranged to cover the link up on SW as follows;

Sunday 5 January
16:30 - 17:10 UTC 7205 KHz (250 kW) beaming north from Johannesburg
3215 KHz 100 kW omni

ARISAS is a joint project of the SA Radio League, SA AMSAT and the SA Amateur Radio Development Trust.

[ANS thanks Hans ZS5AKV, for this report.]

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SB SAT @ AMSAT $ANS-005.09
WEEKLY SATELLITE REPORT PT 1

HR AMSAT NEWS SERVICE BULLETIN 005.09 FROM AMSAT HQ
SILVER SPRING, MD, JANUARY 05, 1997
TO ALL RADIO AMATEURS BT
BID: $ANS-005.09

FO-29
(Uplink 145.9-146.0MHz CW/LSB, Downlink 435.8-435.9MHz CW/USB)
JARL changed the FO-29 operating schedule. 9600bps operation was canceled.
31Dec - 6Jan : Digi-Talker
[ANS thanks Masa, JN1GKZ, for this update.]

MIR:
(Uplink 145.2MHz FM, Downlink 145.8MHz FM)
The above split is used for both packet and voice operation.
See ANS-005.01 for more information.

SAFEX,
(Uplink 435.750MHz FM, Downlink 437.950MHz FM,
Subaudible tone 141.3 Hz)
The repeater appears to be down at this time and no further
information is available.

RS-12:
(Uplink 21.21-21.25MHz CW/SSB, Downlink 29.41-29.45MHz or
145.91-145.95Mhz CW/SSB)
The sat is giving extremely good downlink signals on 2 meters. In
this period of poor propagation on 15 m, the T-mode is providing very
easy access to the satellite. Interesting DX activity has been spotted
in Europe with stations in Egypt, Crete, Cameroon, etc.
[ANS thanks Stefano Badessi, PA3FWP, for this report.]

RS-10:
(Uplink 145.865-145.905MHz CW/SSB, Downlink 29.36-29.4MHz CW/SSB)
Operating normally. Very busy with lots of QSOs heard over
north America and Europe.

RS-15
(Uplink 145.858-145.898MHz CW/SSB, Downlink 29.354-29.394MHz CW/SSB)
Operating normally.
(Hint: If SSB doesn't work for you, try CW. CW is very easy
to hear on the downlink!)

KO-23
(Uplink 145.85, 145.9MHz FM, Downlink 435.175MHz FM,
9600 Baud FSK.)
KO-23 downlink frequency is approximately 4 KHz low, but all other
operations are normal.

.KO-25:
(Uplink 145.87MHz FM, Downlink 436.5MHz FM,
9600 Baud FSK.)
KO-25 continues to send messages "Frames heard from LOADER-9" The
satellite is closed to file uploads.

[ANS thanks Jim Weisenberger, AA7KC, for his reports on
KO-25 and KO-23.]

AO-27:
(Uplink 145.85MHz FM, Downlink 436.8MHz FM)
December-08-1996.
Good conditions on the bird and good QSO in it's orbits
over Europe during the weekend Heard: F6HLG, DG5MNC,
EB5BCF, EA5AAJ, DH5JY, DL2DRD etc
[ANS thanks Miguel A. Menendez, EA1BCU, for this report.]

As of NOV 2, the AO-27 schedule is as follows:

TEPR 4 = 16 = 8 Minutes in Length
TEPR 5 = 52 = 18 Minutes in Length

TX-3 is on Mid Power during TEPR 5.

This will have the TX turn on 8 Minutes after the satellite
enters the sun for a duration of 18 Minutes. This is a "back to US
Latitudes"operation.

N4USI, AO-27's current Command Station sends his thanks all for
their messages about the satellite turning on later than expected. He
reports he's deliberately letting the "turn on" time drift later
(for about 4-5 Minutes) so stations in the southern latitudes can also

have a chance to work AO-27. Every few months he will be letting the
turn on time drift like this to give more stations a chance to make
contacts thru the satellite.
[ANS thanks Michael, N4USI , AO-27 Control-op, for this
update.]

AO-10:
(Uplink 435.030-435.18MHz CW/LSB, Downlink 145.975-145.825MHz CW/USB)
Operating normally. Stacey E. (Chuck) Mills, W4SM, reports that
Ken Ernandes is looking into getting updated keps. Though the orbit
doesn't change very fast, things are now off by a bit, especially at
perigee. Mills calculated the blon/blat, -125/5, about one year ago and
is waiting to see if predictions for this year hold up.

Below is a 14-day update on the AO-10 Keps from the NASA OIG RAID RBBS.
AO-10
1 14129U 83058B   96299.11613815 -.00000305 00000-0 10000-3 0 4631
2 14129 25.8792 182.5891 6052907 60.2572 346.3435 2.05882271 72548
[ANS thanks Ken Ernandes, N2WWD, for these keps.]
.A lot of activity was noted this weekend when the sat was over
America. The bird was still workable up to phase 60. Still a bit of
FM-ing when operating in CW
[ANS thanks Stefano Badessi, PA3FWP, for this report.]

/EX

SB SAT @ AMSAT $ANS-005.10
WEEKLY SATELLITE REPORT PT 2

HR AMSAT NEWS SERVICE BULLETIN 005.10 FROM AMSAT HQ
SILVER SPRING, MD, JANUARY 05, 1997
TO ALL RADIO AMATEURS BT
BID: $ANS-005.10

AMSAT-OSCAR-16 (PACSAT)
(Uplink 145.9, 145.92, 145.94, 145.86MHz FM, Downlink 437.0513MHz SSB,
1200 Baud PSK.)
Continues in good working order.
[ANS thanks Miguel A. Menendez, EA1BCU, for this report.]

FO-20
(Uplink 145.9-146.0MHz CW/LSB, Downlink 435.8-435.9MHz CW/USB)
Strong downlink signal and very busy with activity.

OSCAR-11
Good, steady signals have been received from OSCAR-11
on 145.825MHz. FM, 1200 Baud PSK
ANS thanks Clive Wallis, G3CWV, for this information.]

IO-26 (ITAMSAT):
(Uplink 145.875, 145.9, 145.925, 145.95MHz FM, Downlink 435.822MHz SSB,
1200 Baud PSK.)
Operating normally. Some report indicate that the downlink
signals from the bird are stronger.
[ANS thanks Richard W L Limebear, G3RWL, for this
report.]

DO-17(DOVE)
(Downlink 145.825MHz FM, 1200 Baud AFSK.)
Jim White reports that DOVE had timed out on December second.
DOVE's software was then uploaded again to correct the
time out problem. Signals from Dove are once again being
received.
 [ANS thanks Jim White, WD0E, and Sergio Adrian Gorgone,

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 LW7DXF, for this information.]

LUSAT-OSCAR-19
(Uplink 145.84, 145.86, 145.88, 145.9MHz FM, Downlink 437.1528MHz SSB,
1200 Baud PSK AX.25.)
This satellite is normally working.
 [ANS thanks Miguel A. Menendez, EA1BCU, for this report.]
.
WEBERSAT (WO-18)
(Downlink 437.104MHz SSB, 1200 Baud PSK AX.25.)
WeberSat (WO-18) is operational with the new telemetry/housekeeping suite
active.  The satellite is currently sending battery WOD:
     16 - Battery 1 Voltage
     17 - Battery 2 Voltage
     18 - Battery 3 Voltage
     1B - Battery 6 Voltage
     1E - Solar Array Voltage
     21 - BCR +10 V Bus

The taking and sending of photos and spectra will begin again soon.
Check it out!
[ANS thanks Tommy Davis, IK3WVJ,  for this report.]

[Please send your Satellite reports to bjarts@uslink.net or to
wt0n@amsat.org]

/EX

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lists: AMSAT-BB, ANS, SAREX, or KEPS. Please *do not* send such
requests to the lists themselves.**

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